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characterized in that said bar-like light source is composed of a light conductive member which is made of a transparent material, formed bar-like and disposed close to and along at least one end face of said transparent substrate, and a spot-like light source which is disposed facing at least one end of said light conductive member, and that a light guiding member guiding light is provided between the end of said light conductive member and said spot-like source;

wherein said light guiding member and said light conductive member are formed integrally as a one-piece member.--

REMARKS

Claims 1-8 are pending. By this Amendment, claim 1 is amended to recite a reflection-type liquid crystal display element, to overcome Abe. New claim 8 is added to recite features disclosed at, for example, page 9, lines 13-16 and Fig. 3. No new matter is added. Reconsideration based on the above amendments and the following remarks is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

The Office Action objects to the claims. Claim 1 is amended to obviate informalities. Withdrawal of the objection to the claims is respectfully requested.

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(b) over Abe et al. (U.S. Patent No. 5,857,761). This rejection is respectfully traversed.

The Office Action asserts that Abe discloses all elements recited in claims 1 and 2. However, Applicants respectfully submit that Abe does not disclose or suggest a transparent substrate ... disposed over a screen of a reflection-type liquid crystal display element, as recited in claim 1.

Abe discloses an illumination device which simplifies the connection between a light source and a radiation plate. See col. 1, lines 53-55. The illumination device also solves the problem of heat generated by the fluorescent tube without a complicated structure associated with the use of bundled optical fibers. See col. 1, lines 18-22 and 27-37. Nowhere does Abe disclose or suggest a transparent substrate disposed over a screen of a reflection-type liquid crystal display element, as recited in claim 1.

For at least the above reasons, Abe does not disclose or suggest the subject matter recited in claim 1 and claim 2 depending therefrom. Withdrawal of the rejection of claims 1 and 2 under 35 U.S.C. §102(b) is respectfully requested.

The Office Action rejects claims 3 and 4 under 35 U.S.C. §103(a) over Abe. This rejection is respectfully traversed.

As discussed above, Abe does not disclose or suggest the subject matter recited in claim 1. Thus, Applicants respectfully submit that claims 3 and 4 are each patentable at least in view of the patentability of claim 1 from which they depend, as well as for the additional features they recite. Withdrawal of the rejection of claims 3 and 4 under 35 U.S.C. §103(a) is respectfully requested.

The Office Action rejects claims 5-7 under 35 U.S.C. §103(a) over Abe in view of Narcisco, Jr. (U.S. Patent No. 5,237,638). This rejection is respectfully traversed.

The Office Action admits that Abe does not teach a spread illumination apparatus comprising a light guiding member having a means of increasing reflection, but asserts that Narcisco discloses a silicon optical waveguide comprising a means for increasing reflection. However, Applicants respectfully submit that Abe and Narcisco, individually or in combination, do not disclose or suggest a transparent substrate disposed over a screen of a reflection-type liquid crystal display element, as recited in claim 1.

Narcisco discloses a flexible optical waveguide possessing a large core diameter for distribution of illuminating light from a source to a target. See Fig. 1 and col. 3, lines 7-10. Nowhere does Narcisco disclose or suggest a transparent substrate disposed over a screen of a reflection-type liquid crystal display element, as recited in claim 1. Thus, Narcisco does not supply the subject matter lacking in Abe. Therefore, Abe and Narcisco, individually or in combination, do not disclose or suggest the subject matter recited in claim 1, and claims 5-7 depending therefrom. Withdrawal of the rejection of claims 5-7 under 35 U.S.C. §103(a) is respectfully requested.

New claim 8 is believed to be patentable. Specifically, new claim 8 is believed to define over Abe, because Abe's light guide 2 and radiation member 3 are separately manufactured and connected at a proximal end 3a of the radiation member 3. See Fig. 1 and col. 5, lines 25-31. While the light guide 2 is a plastic optical fiber having a single core of silicon rubber and a cladding layer, the radiation member 3 is a transparent circular cylinder made of acrylic resin. See col. 5, lines 32-41. Thus, Abe's light guide 2 and radiation member 3 are not formed integrally as a one-piece member.

In contrast, new claim 8 recites a light guiding member and a light conductive member that are formed integrally as a one-piece member. Thus, new claim 8 defines over Abe.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Gang Luo
Registration No. 50,559

JAO:GXL/can

Attachment:
Appendix

Date: September 9, 2002

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
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APPENDIX

Changes to Claims:

Claim 8 is added.

The following is a marked-up version of the amended claim:

1. (Amended) A spread illuminating apparatus ~~having comprising:~~ a transparent substrate made of a light transmissible material and disposed over a screen of a reflection-type liquid crystal display element; and a bar-like light source disposed in the vicinity of an end surface of a transparent substrate made of a light transmissible material, characterized in that said light source is composed of a light conductive member which is made of a transparent material, formed bar-like and disposed close to and along at least one end face of said transparent substrate, and a spot-like light source which is disposed at at least one end of said light conductive member, on an electric wiring board,
wherein~~and that~~ a light guiding member which can guide~~guiding~~ light is provided between the an end of said light conductive member and said spot-like light source.